



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/656,588  
Filed: September 7, 2000  
Inventors:  
Michael J. Duigou, et al.

Title: Method and Apparatus for  
Proximity Discovery of  
Services

Examiner: Blair, Douglas B  
Group/Art Unit: 2142  
Atty. Dkt. No: 5181-72300

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Robert C. Kowert

Name of Registered Representative



Signature

May 16, 2006

Date

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Appellants request review of the rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reasons stated below.

Claims 1-54 remain pending in the application. Reconsideration of the present case is earnestly requested in light of the following remarks. Please note that for brevity, only the primary arguments directed to the independent claims are presented, and that additional arguments, e.g., directed to the subject matter of the dependent claims, will be presented if and when the case proceeds to Appeal.

The Examiner rejected claims 1-9, 11-15, 19-27, 29-33, 37-47 and 49-51 under 35 U.S.C. § 103(a) as being unpatentable over Hodes ("Composable Ad Hoc Location-Based Services for Heterogeneous mobile clients") in view of Hild et al. (U.S. Patent 6,532,368) (hereinafter "Hild"); claims 10, 28, and 48 as being unpatentable over Hodes in view of Hild and in further view of Schuster (U.S. Patent 6,795,429); and claims 16-18, 34-36 and 52-54 as being unpatentable over Hodes in view of Hild and further in view of Bell (U.S. Patent 6,405,027). Appellants respectfully traverse these rejections and submit that the Examiner has clearly failed to present a *prima facie* rejection of Appellants' independent claims.

**Regarding claim 1, Hodes in view of Hild clearly fails to teach or suggest a client device directly requesting to the service device a document that describes an interface to access a service**

**provided by the service device.** The Examiner cites section 3.3 of Hodes. However, the Examiner's reliance on Hodes is misplaced. Hodes teaches a system allowing users with mobile clients to discover, access and control devices. Hodes system does not involve a client *directly requesting to a service device* a document describing an interface to access a service **provided by the service device**. Instead, Hodes teaches the use of service interaction proxies (SIPs) that "run at domain-specific granularities and aggregate a group of services with a single set of advertisements" (Hodes, section 3.1, paragraph 2). Hence, instead of clients requesting interface documents directly from service devices, Hodes specifically teaches that SIPs aggregate service information for multiple service devices, such as all the controllable lights in a room (see, Hodes, section 2.2.1).

Hodes' service interaction proxy (SIP) device cannot be considered the service device of Appellants' claims because Hodes' SIP is not a service device from which a document is requested that describes an interface to access a service **provided by the service device**. In other words, Hodes does not describe a client directly requesting a document describing an interface for accessing a service provided by a SIP, which would be required for the Examiner's interpretation to be correct. Instead, as noted above, clients in Hodes' system receive aggregated service advertisements from SIP devices that include interface descriptions for accessing and controlling services that are provided by devices other than the SIP device (such as controllable light switches). Thus, by requiring the use of a proxy SIP, **Hodes actually teaches away** from a client directly requesting to the service device a document that describes an interface to access the service **provided by the service device**.

**Additionally, Hodes in view of Hild fails to teach or suggest the client device receiving the document directly from the service device, wherein the document comprises information describing how to access the service.** The Examiner again relies on Hodes, citing section 3.7.2 where Hodes describes his Interface Specification Language (ISL). However, nowhere does Hodes mention that a client device receives an ISL *directly from a service device*. Instead, as described above, Hodes teaches the use of SIPs that aggregate and distribute service information for multiple controllable objects. Thus, a client in Hodes' system would not receive a service information document directly from the service device. Instead, a client in Hodes' system would request and receive an ISL from a local SIP device, which is not the device that provides the service.

The Examiner responds, in the Response to Arguments, by asserting, "the claim language merely states that the client requests a service directly from the service device" and that "[t]here is no limitation which states that the service is on the service device." However, claim 1 recites, in part, "the client device **directly requesting to the service device** a document that describes an interface to access a **service provided by the service device**". Thus, in contrast to the Examiner's statement, there is a specific limitation that the service is provided by the service device. The Examiner also states, "[t]he SIP reads on the service device because it is in fact a device that provides services" and "[t]he SIP provides interface specifications to the client which are considered document[s] describing an interface." However, as discussed above, Hodes' clients do **not** request from the SIP a document that describes an interface to access a service **provided by the SIP**. Additionally, the interface specifications provided by Hodes' SIP do not describe interfaces to access any service *provided by the service device*, as required by Appellants' claim. Thus, Hodes' SIP cannot be considered the service device of Appellants' claim.

**Furthermore, Hodes in view of Hild clearly fails to teach or suggest the client device forming a direct point-to-point communication link with the service device.** The Examiner admits

that Hodes fails to teach a method for accessing a service using a direct point-to-point link and relies upon Hild, citing column 8, lines 9-20. However, the cited portion of Hild merely describes the various types of network topologies with which Hild's system is compatible. Moreover, the cited passage describes that Hild's system is "independent of the network topology and may be used on any kind of network topology allowing broadcast" (Hild, column 8, lines 15-18). The brief mention of a point-to-point connection as part of a possible network topology in Hild does not teach or suggest a client actually forming a direct point-to-point communication link with a service device or the client using such a direct point-to-point link for requesting and receiving a document describing an interface to access a service provided by the service device.

As for actual device connections, Hild teaches a system in which all service devices periodically broadcast information regarding services that each particular device is aware of, regardless of whether those services are provided by the sending device or other devices of which the sending device is aware. Hild specifically teaches that each device includes services information provided by other devices as well as its own when broadcasting service announcements. Hild's system includes periodic broadcasts and Hild does not describe anything about a client device directly requesting a document describing an interface to access a service. Moreover, Hild does not teach anything about a client *requesting* anything. The Examiner has not cited any portion of Hild that mentions anything about a client device sending any sort of request. Instead, every device in Hild's system listens for a certain amount of time and if, by that time, it has not received a service announcement that includes its own service information it will send out a service announcement including its own service information as well as information regarding all other services of which it is aware (Hild, column 4, line 56-column 5, line 12; column 8, line 65 – column 9, line 12).

In the Response to Arguments, the Examiner states, "Hild shows that a point-to-point connection is an obvious way to access a wireless system." The Examiner has misunderstood Appellants' argument. Appellants' have not made any argument regarding the general obviousness of using a point-to-point connection *to access a wireless system* in general. As stated above, Appellants hold that the Examiner's combination of Hodes in view of Hild does not teach or suggest **the specific limitations** of Appellants' claim. For example, as noted above, neither Hodes nor Hild, whether taken singly or in combination, teach or suggest a client device forming a direct point-to-point communication link with a service device and directly requesting to the service device a document that describes an interface to access a service provided by the service device. As explained above, Hild mentions point-to-point communications in two places, both in a very general manner. At column 2, lines 26-31, Hild states:

Even household devices, such as CD players, televisions and toasters, could identify and adapt to individual preferences and tastes using PAN technology. The PAN networks are usually point to point where the human body serves as a broadcast communications medium.

This reference by Hild to point-to-point communication bears absolutely no relevance to either Hodes or to Appellants' claim. The other reference to point-to-point communications by Hild states: "The present scheme can be used in local networks with point-to-point and/or point-to-multi-point connections"(Hild, column 8, lines 9-11). Thus, as Appellants noted above, Hild fails to teach or suggest anything specific about a client forming a direct point-to-point communication link with a service device. The extremely general statements by Hild regarding point-to-point communications,

even when combined with Hodes, do not teach or suggest **the specific limitations** of Appellants' claims, as discussed below in more detail.

Even when combined as suggested by the Examiner, Hodes in view of Hild, fails to teach or suggest a client device directly requesting to a service device a document that describes an interface to access a service provided by the service device; and the client device receiving the document directly from the service device, wherein the document includes information describing how to access a service provided by the service device. Instead, as noted above, Hodes teaches that a client will access a SIP device to request an interface document describing how to access services *provided by other controllable objects*. Hild teaches that devices periodically broadcast their service information as well as service information regarding other services provided by other devices. Thus, even when combined as suggested by the Examiner, Hodes in view of Hild does not teach or suggest a client device directly requesting to a service device a document that describes an interface to access a service provided by the service device; and the client device receiving the document directly from the service device, wherein the document includes information describing how to access the service.

In fact, both references teach away from a client device forming a direct point-to-point communication link with a service device. As discussed above, Hodes requires the use of an SIP proxy, as opposed to a direct point-to-point communication link. And the devices in Hild listen to broadcast communications as opposed to making requests over a direct point-to-point communication link.

In the Response to Arguments the Examiner states, “[t]he use of a point-to-point connection to access a wireless device is not a novel concept.” As noted above, Appellants have never made any argument regarding the novelty of simply using a point-to-point connection to access a wireless device. Instead, Appellants are arguing that the teachings of Hodes and Hild, whether taken singly or in combination, do not teach or suggest *the specific limitations* of Appellants' claim 1. The Examiner appears to be attempting to reject Appellants claim in view of his general contention that “use of a point-to-point connection to access a wireless device is not a novel concept”, which is clearly improper. The Examiner has failed to provide or cite any prior art that teaches or suggest the specific limitations as recited in Appellants' claim.

Furthermore, the Examiner has failed to provide a proper motivation for modifying Hodes' system to incorporate the Examiner's selected teachings from Hild. The Examiner merely states that it would have been obvious to combine “the teachings of Hode[s] regarding the discovery of interfaces for accessing a service with the teachings of Hild regarding accessing a service via a direct point-to-point link because a point-to-point link would be a common way of accessing a service interaction proxy such as the one taught by Hode[s].” However, merely because a direct point-to-point links may be “a common way of accessing” devices in some contexts, does not provide any motivation to modify the specific system of Hodes away from the use of SIPs providing aggregated service information to clients. Merely stating that individual aspects of a claimed invention are well known does not render the combination well known without some objective reason to combine the individual teachings. *Ex parte Levengood*, 28 USPQ2d 1300. The Examiner's statement that a point-to-point link would be a common way of accessing Hodes' SIP device does not change the fact that in Hodes a client does not request a document from a SIP device that describes an interface to access a service provided by the SIP, as would be required for the Examiner's line of reasoning to be correct.

Additionally, Hodes specifically teaches that SIPs provide aggregated service information for other service devices instead of service information being directly requested from service devices themselves. Modifying Hodes so that clients directly request service information from the service devices themselves via a direct point-to-point link with the service device would clearly change the principle of operation of Hodes' system. As noted at M.P.E.P. § 2143.02, "if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." Such is the case here. The Examiner proposes changing one of the basic principles of Hodes system of using a proxy instead of a direct point-to-point communication link to the service device. Such a modification of Hodes is clearly improper. *See In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984).

Thus, for at least the reasons presented above, the rejection of claim 1 is not supported by the cited art and removal thereof is respectfully requested. Similar remarks also apply to claims 19, 37, 38 and 39.

In light of the foregoing remarks, Appellants submit the application is in condition for allowance, and notice to that effect is respectfully requested. If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Appellants hereby petition for such an extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 501505/5181-72300/RCK.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☒ Notice of Appeal

Respectfully submitted,



Robert C. Kowert  
Reg. No. 39,255  
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C.  
P.O. Box 398  
Austin, TX 78767-0398.  
Phone: (512) 853-8850

Date: May 16, 2006